there was a history of traumatism, in nineteen alcoholic excesses. Out of 175 cases with complete histories, 56 per cent. gave a positive history of syphilis, and 25 per cent. a probable history. In seventy-eight cases the period from infection to the symptoms of paresis varied from two to twenty-nine years.

ALIMENTARY GLYCOSURIA IN FEBRILE DISEASE.

POLL (*Fortschritte der Med*, 1896, No. 13) calls attention to a fact which seems hitherto to have escaped notice, viz., that acute febrile conditions favor the occurrence of alimentary glycosuria. Croupous pneumonia seems especially prone to this, though typhoid fever, angina (tonsillar abscess), articular rheumatism, and scarlatina also furnished examples. In connection with this Poll recalls the fact that in animal experiments the liver during fever contains less glycogen than normal, even if the animals have been fed with carbohydrates, so that an insufficiency of the glycogen-depot has been spoken of. It may be supposed that part of the glucose which finds no place in the liver remains in the blood and is excreted by the kidneys. Whether this explanation holds for the clinical facts must be determined by further experiments, some of which are now making in von Noorden's laboratory.

SURGERY.

UNDER THE CHARGE OF

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THE PRESENT POSITION OF THE RADICAL OPERATIONS FOR CHRONIC SUPPURATIVE OTITIS.

JONES (*British Medical Journal*, May 30, 1896) makes the following classification of cases of otitis, and gives the appropriate treatment for each:

A. (1) Simple chronic purulent inflammation limited to the main cavity of the tympanum with a perforation in the membrana tensa. (2) The disease limited as in (1), but accompanied by formation of polypi unconnected with bone-disease. (3) In which removal of polypi or granulations from easily accessible parts of the tympanum or meatus reveals small superficial patches of roughened bone.

Cases of group A, except when due to tubercle, are amenable to treatment by the older methods, including curetting, properly carried out.

B. (4) Attic-suppuration, with or without caries of the ossicles.

(5) Cases originally belonging to one of the above four classes, in which adhesions between the ossicles and between the ossicles and tympanic walls interfere with drainage or cause subjective symptoms—extreme deafness, tinnitus, or giddiness.

Several cases of group B might be cited in which recovery took place without radical operation; but in the majority no permanent improvement is gotten until the ossicles are removed by natural or artificial means; in the meantime the patient is subjected to grave risk or to serious discomfort.

C. (6) Chronic suppuration of the mastoid antrum. (7) Cholesteatomata. (8) Caries of mastoid antrum or some part of the tympanic walls which, though inaccessible through the meatus, can be removed by operation without risk to important structures.

No lasting good can be done in cases of this group except by radical operation; the method best adapted to them is the so-called Stacke-Schwartze operation.

D. (9) Caries or necrosis of the petrous bone which cannot be eradicated without destroying important structures or without risk to life. It is in this and group C that tuberculous cases are usually met with.

In group D, seeing that the exfoliation of the diseased bone must to a large extent be allowed to take its own time, it is better to establish a permanent opening in the mastoid.

E. (10) Caries or hyperostosis or exostosis proceeding side by side. Unfortunately the detection of hyperostosis is practically impossible until operation is begun. Owing to the extreme hardness and brittleness of the bone and the sudden change to cancellous or carious bone, these cases can be only safely operated on with the dental burr.

The author believes that, except in tuberculous disease, cholesteatoma, and extensive caries, as much of the natural lining should be preserved as possible, as it tends to prevent dryness and is nearer the normal.

A CASE OF HOUR-GLASS CONTRACTION OF THE STOMACH TREATED BY WÖLFLER'S METHOD.

LAUENSTEIN (*Münch. med. Woch.*, May, 1896) reports a very interesting case of this rare disease operated upon, with relief of all symptoms, by Wölfler's method.

The patient was forty-three years of age, and had been complaining for some years of an obscure disease of the stomach. The symptoms were none of them sufficiently definite to make a diagnosis upon, but the condition became so serious that an operation, exploratory in part, but with the intention of relieving a pyloric stenosis, was determined upon. The incision disclosed the stomach adherent by its lesser curvature to the liver and divided into cardiac and pyloric pouches by an hour-glass contraction. The adhesion to the liver was severed and the two sacs made to communicate by a gastro-anastomosis. The patient made a complete and uncomplicated recovery, all the symptoms subsiding, and the patient regained her normal health and weight.

The most marked differential diagnostic symptom was the vomiting of small quantities of water when the attempt was made to wash out the stomach, because of the smallness of the cardiac end of the stomach. The occurrence of so small a stomach is of great rarity, except with carcinomatous disease, and, where this is absent, should lead one to consider the chance of hour-glass contraction.

THE OPERATIVE TREATMENT OF FRACTURE OF THE PATELLA.

In discussing the results obtained in the treatment of this fracture by various methods **WHITE** (*Annals of Surgery*, 1895, No. 5) gives the following as the results which he has obtained by the use of Barker's method, which he has used in a considerable number of cases:

"I have not invariably succeeded in getting bony union, but have done so in the great majority of cases, and have never had any extensive separation of the fragments. My average results as to shortening the time of treatment and as to the functional usefulness of the joint later have been far superior to any I had obtained before adopting this method. The patients have never had the least after-trouble, and in no case has there been suppuration, or fever, or even marked pain.

"The operation is easy and simple, and can be done in a very few minutes. The lower fragment of the patella is steadied by the finger and thumb, and a narrow-bladed knife thrust into the joint, edge upward, in the middle of the ligamentum patellæ at its attachment to the lower fragment. Through the wound thus made a stout-handled pedicle-needle is thrust into the joint behind the lower fragment, and pushed up behind the upper fragment and through the quadriceps tendon in the middle line as close to the border of the bone as possible, the upper fragment being forced down and steadied. When the point of the needle becomes apparent beneath the skin the latter is drawn upward and incision made upon the needle, the eye of which is then threaded with sterilized silk and the needle withdrawn, carrying the thread behind the fragments. The needle is next unthreaded and passed through the same skin-wound below and out of the upper wound, but this time in front of and close to both fragments. Here it is threaded with the upper end of the suture and withdrawn. The two fragments are then brought together, friction is made to displace clots or other foreign material, and the ligature tied tightly over the lower border of the patella. The two ends of the ligature are cut short and the wound closed. A posterior splint and figure-of-eight bandage are applied. Passive motion may be begun on the tenth day. The patient may get out of bed wearing a light plaster-bandage at the end of the third week. Good use of the joint may be expected in from eight to ten weeks or earlier."

THE ACTION OF STERILE INJECTIONS OF STREPTOCOCCIC AND SAPROPHYTIC TOXINS UPON THE HUMAN ORGANISM, ESPECIALLY UPON TEMPERATURE AND TOXIC HERPES.

FRIEDRICH (*Langenbeck's Arch.*, Bd. l. Hft. 4; *Berlin. klin. Woch.*, 1895, 49) summarizes his observations as follows:

I. Sterilized virulent cultures of streptococcus longus produce, when injected either subcutaneously or parenchymatously, a fever which begins at the end of four hours and at the end of twelve hours has reached 104° F.; a similar dose given forty-eight hours later raises the temperature to only 100.3° F. The action of the poison is, *cæteris paribus*, dependent upon the resistance of the particular individual and the grade of his immunization to the particular poison. A culture most virulent for animals produced in man an almost reactionless senility. Filtrates produce similar effects to cultures, only in a less marked degree.

II. A sterilized mixed culture of streptococcus longus and bacillus prodigiosus in a 1 to 300 solution, a dose harmless for mice, guinea-pigs, and rabbits, produced a severe intoxication. On the other hand, the filtrate from the same cultures was very weak in its action, even less as far as the fever went than the pure streptococcus filtrate. It is, therefore, probable that the proteids which accompany the living bacteria are responsible for the injurious action on man.

III. After the injection of the sterilized mixed culture herpes facialis was observed seven times, sometimes extending over large areas, appearing in thirty to fifty-eight hours and after the fever. In five cases there were paræsthesias in the part involved, with pain on pressure in the supraorbital nerve, and in two cases pain after the drying of the vesicles. In the vesicles staphylococcus pyogenes aureus was found three times, and evidence that they have nothing to do with the etiology of the vesicles.

ASEPSIS IN CATHETERIZATION.

GROSGLIK (*Cent. für Chir.*, 1896, No. 1) says that the mechanical methods employed for the sterilization of catheters are entirely inadequate. Complete sterilization can be obtained by the action of hot air at a temperature of 130° C. for one hour, or under steam-pressure for fifteen minutes. Metal catheters may be sterilized in boiling water; but the author cautions against the use of soda in the water, as particles remain attached to the catheter and produce irritation in the urethra.

Strict asepsis should be observed both in the patient and the operator; the meatus and external genitalia should be carefully washed in sublimate solution.

The greatest difficulty, however, is experienced in disinfecting the urethra. The mucous membrane is the seat of numerous forms of bacteria and they are difficult to dislodge. Disinfection is necessary in all acute and chronic infections, in which there is complete or incomplete retention of urine or in which there is hyperæmia or lesion of the vesical mucous membrane.

To procure this sterilization a pint to a pint and a half of sterilized water should be injected gradually into the urethra, care being taken to make the outflow easy so that the water will not enter the bladder. The posterior urethra can be disinfected only in conjunction with the disinfection of the bladder.

FRANK (*Cent. für Chir.*, 1896, No. 4) disinfects the different kinds of catheters in formalin-vapor; he hangs them up in a glass cylinder having a sieve-like bottom which fits over a dish containing formalin-pastels. The catheters are completely sterilized after the lapse of twenty-four hours. The use of the catheters disinfected in this manner produces no harmful results.

THE QUESTION OF POSITION IN THE TREATMENT OF FRACTURES OF THE LOWER END OF THE HUMERUS.

POWERS briefly reviews the question of the proper position of the elbow in fractures of the lower end of the humerus (*Medical Record*, New York, 1896, vol. xlix. No. 18), and supplements his views with those of Drs. Frank Hartley, B. Farquhar Curtis, and W. W. Van Arsdale. The total number of cases recorded by these gentlemen is 650. Powers concludes as a result of this collective study that "it is our opinion that the best results are obtained by treating the limb in the flexed position, and that the general practitioner will find the greatest degree of satisfaction in following this form of management."

The opinions in detail are:

HARTLEY and **WOODBURY** (*Roosevelt Hospital*). (*a*) Internal condyle—gypsum-splints from fingers to shoulder, forearm semiprone, elbow at right-angle; (*b*) external condyle—the same as the internal, except that the forearm is supinated; (*c*) transverse or T-shaped gypsum-splint from fingers to shoulder or with shoulder spica, forearm supine, elbow at less than a right-angle.

CURTIS (*Chambers Street Hospital* and the *Vanderbilt Clinic*). Plaster-of-Paris bandage from fingers to axilla in most cases; occasionally, when the superficial soft parts are impaired and need watching, a removable dressing with a wooden or tin splint. In the great majority of cases the limb is put up with the elbow inside of a right-angle, but not actually flexed, as the latter position would be less comfortable. The hand is in semipronation. When the "carrying-point" is lost and it is difficult to restore it, owing to the slipping of the fragments, as usually occurs in fractures of the internal condyle, the limb is put up in full extension and supination, with particular attention to the "carrying-point" for about two weeks, by which time the liability to lateral angular deformity has disappeared, and yet union is not so solid as to render it impossible to correct any outer displacement which might interfere with flexion. Then ether is again given, the elbow flexed inside of 90°, and a plaster-splint applied, with careful attention to the position of the fragments. This splint is left in place until consolidation is complete.

VAN ARSDALE (*Good Samaritan Dispensary*). In all cases flexion to 90° or to 80°; starch or pasteboard dressing until the swelling abates; then the same or plaster-of-Paris for three or four weeks, according to age (until union is complete).

POWERS (*Chambers Street* and *New York Hospitals*). "I have put the limb up in plaster-of-Paris at about 90° when first seen, except in those cases in which a tendency to "gunstock" deformity was apparent. In these latter instances I have made the angle 135° for ten days or two weeks, reduction being made under an anæsthetic, with careful attention to the 'carrying-point,' and then changing the angle to 90° or to 80°. I am convinced that the extended position is not necessary to the obtaining of suitable coaptation of the fragments, and I am by no means sure that a moderate degree of cubitus varus is prejudicial to the usefulness of the limb, though I do not know that I am prepared to go quite so far as does Mr. Robert Jones, of Liverpool, who says that neither it nor cubitus valgus is of any consequence from either an æsthetic or a functional aspect."